REMARKS/ARGUMENTS

Applicants wish to thank the Examiner for the courtesy of the telephone interview conducted on February 18, 2010, and for allowance of claims 1, 3-8, 10-14, and confirm that the summary of the interview as stated in the Examiner's summary mailed with the Notice of Allowance of February 25, 2010, is accurate. Applicants also acknowledge that Examiner rejected claims 15-23 over prior art of *Farina and Koichi*, and, per Applicant's attorney agreement, cancelled claims 15-23 by Examiner's amendment.

Applicants appreciate the time and consideration provided by the Examiner in reviewing this application, however, respectfully traverse the rejection of claims 15-23 and request examination of the claims and reconsideration of the Examiner's decision. Claims 24-33 newly added by this amendment fully correspond to cancelled claims 15-23, respectively.

Applicants traverse the rejection at least for the following reason:

Farina (USPN 5,515,199) discloses a system for correcting nonlinear distortion in fiber optic systems (e.g., Abstract.)

In the present application, the optical signal is modulated with a first modulation signal and then with a second modulation signal. In *Forina,* an optical signal is modulated with one modulation signal and there is no teaching or suggestion of ***modulation by a second signal***. In other words, in *Farina,* distortion with respect to the first modulation signal is corrected, and the distortion occurs at an optical modulator when modulating the optical signal with the first modulation signal. In contrast, in the present invention, the distortion is corrected with respect to the second modulation, wherein the distortion occurs at an optical modulator when modulating the optical signal with the first modulation signal.

Specifically, in **Farina**, an optical signal including a modulation signal is combined with an optical signal including a correction signal in optical domain. In the present invention, an optical signal including a modulation signal is modulated with *an electrical signal including a correction signal*. Therefore, in *Farina*, the distortions are corrected at the receiver side of the system, when the optical signal including the modulation signal is detected along with the optical signal including the correction signal (e.g., column 3, lines 38-54).

In contrast, in the present invention, the distortion is corrected ***at the transmitter side of the system*** (see Figure 30).

In this regard, *Koichi* (JP06-104867) discloses an optical transmission apparatus, in which an optical signal from a single optical source is modulated in series at a plurality of optical modulators with a plurality of frequency multiplexed signals, respectively. However, *Koichi et al.* neither disclose nor suggest a correction of distortion with respect to ***a second modulation signal***, wherein the distortion occurs at an optical modulator when modulating an optical signal with a first modulation signal. Also, no such disclosure is found in the rest of the cited references.

Accordingly, Applicants believe that ***the cited references, alone or in combination, do not disclose the present invention as claimed in the newly added independent claims 24 and 27.***

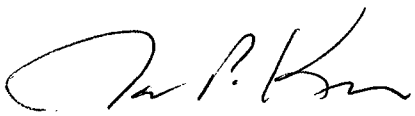
Applicants maintain that dependent claims 25-26, and 28-32 are also novel and patentable over the prior art.

Applicants respectfully submit that the application is now in condition for allowance, which allowance is earnestly solicited.

The Commissioner is hereby authorized to charge any additional fees which may be required with respect to this communication, or credit any overpayment, to Deposit Account No. 06-1135.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY



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